

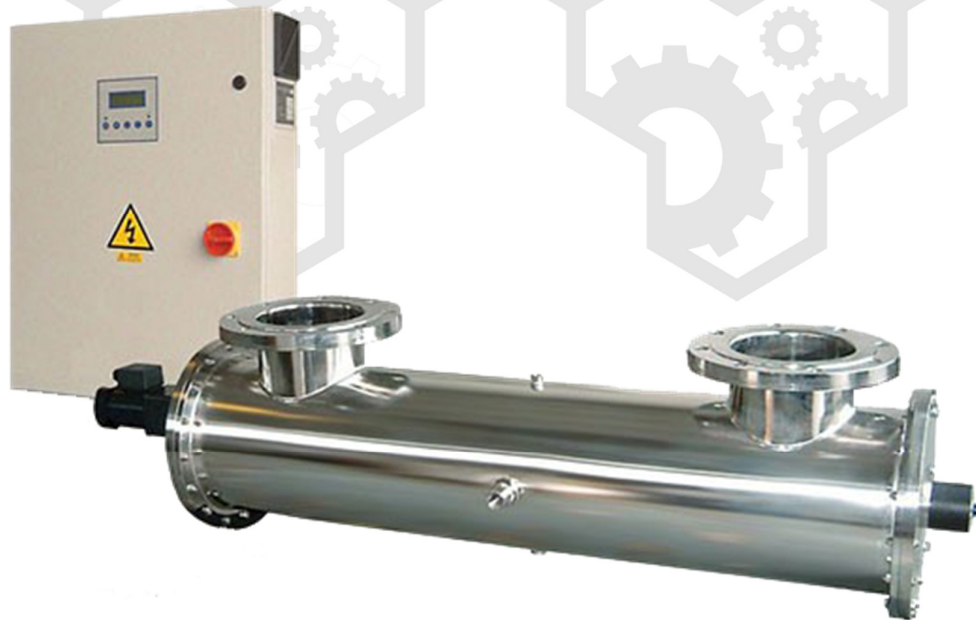
ULTRA VOILET FILTERTION

About

Ultraviolet or "UV" is a type of energy found in the electromagnetic spectrum, lying between x-rays and visible light. Although we cannot see UV light or rays, we are exposed to them every time we step out into the sun.

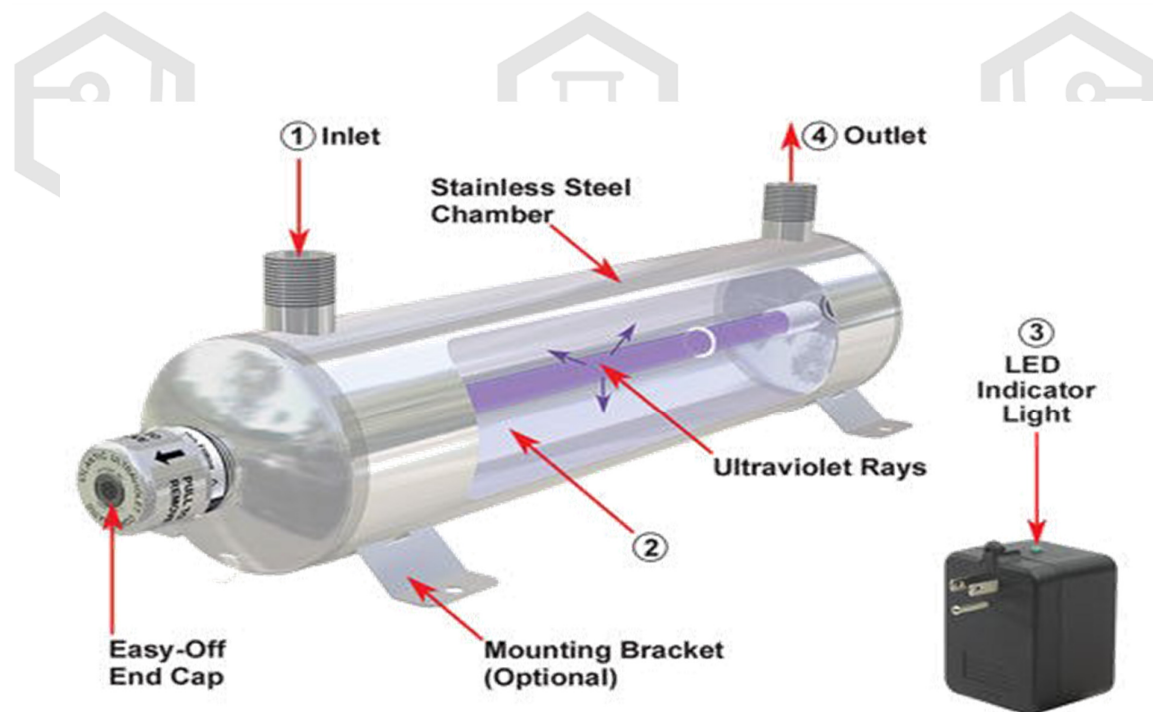
Ultraviolet water purification is the most effective method for disinfecting bacteria from the water. Ultraviolet (UV) rays penetrate harmful pathogens in your home's water and destroy illness-causing microorganisms by attacking their genetic core (DNA). This is extremely efficient in eliminating their ability to reproduce. Disinfecting your water with Ultraviolet light is exceptionally simple, effective and environmentally safe. UV systems destroy 99.99% of harmful microorganisms without adding chemicals or changing your water's taste or odour. UV water purification is usually used with other forms of filtration such as reverse osmosis systems or carbon block filters

ULTRA VOILET FILTERATION SYSTEM



Working Principle

UV Water Purification systems use special lamps that emit UV light of a particular wavelength that have the ability, based on their length, to disrupt the DNA of micro-organisms. These UV light waves are also referred to as the Germicidal Spectrum or Frequency. The frequency used in killing micro-organisms is 254 nanometers (nm). As water passes through a UV water treatment system, living organisms in water are exposed to UV light which attacks the genetic code of the microorganism and rearranges the DNA /RNA, eliminating the microorganism's ability to function and reproduce. If a microorganism can no longer reproduce, it cannot replicate, therefore it cannot infect other organisms with which it has contact. This process of exposing water to UV light is simple but effective, destroying 99.99 percent of harmful microorganisms without adding any chemicals to water.



Ultraviolet Purification Advantages

- Chemical Free: UV purification does not use any chemicals like chlorine or leave any harmful by products.
- Taste & Odour Free: UV does not add any chemical taste or odour to the water.
- Extremely Effective: One of the most effective ways to kill disease-causing microbes by destroying 99.99%.
- Requires very little energy: Uses about the same energy as it would to run a 60-watt light bulb.
- Low Maintenance: Set and forget type of system, just change UV bulb annually.

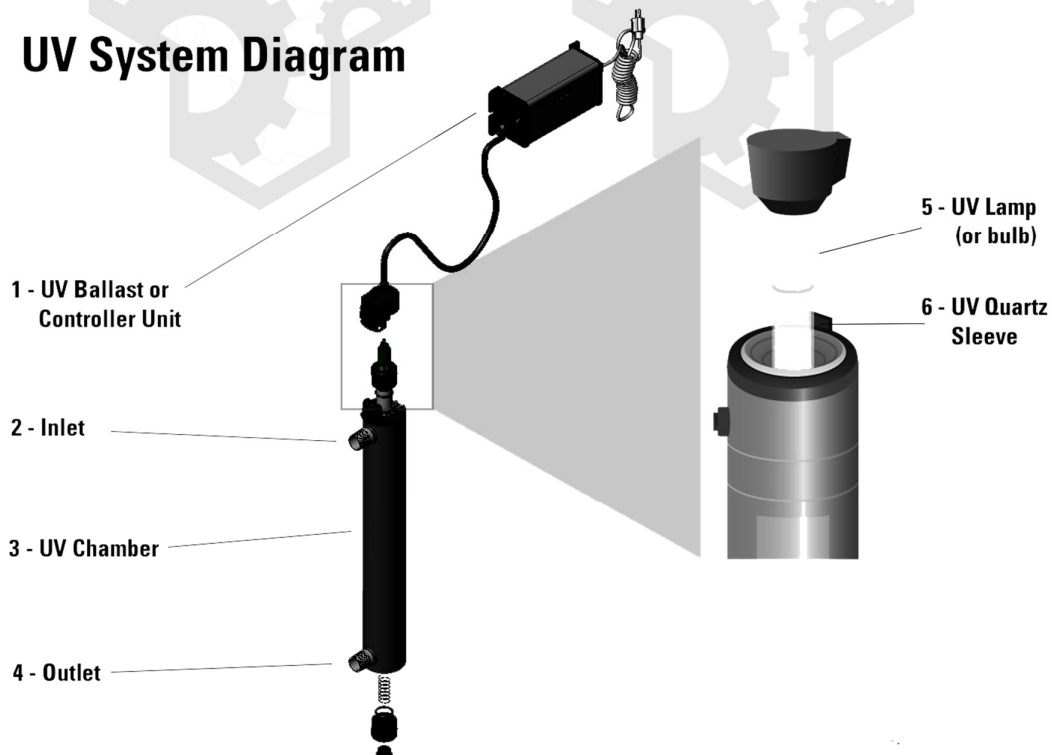
Product Description

- :: Application - Clear water & Waste Water Treatment
- :: UV Lamp type - Low Pressure, High-Performance quartz Lamps
- :: UV Lamp life - upto 8500 hours
- :: Ballast - Matched High Frequency Electronic Ballasts
- :: Input Power - 230 - 240v Ac, 50-60 Hz
- :: UV Chamber - Electro-Polished SS 316L
- :: Lamp Fail Alarm - Audio-visual
- :: For all flow ranges with auto wiper system & Monitoring Assembly (as per requirement)

What are the Parts of UV System?

1. UV Ballast or Controller Unit - This is the “brains” of the UV system. Some systems have a very simple controller, and others have a more complicated system that includes alarms, lamp change timers, trouble indicator lights, and more. Although UV units vary in complexity and size, all controllers do basically the same thing of controlling the electrical output of the lamp and powers the UV-C light needed for water purification.
2. Inlet for untreated water.

UV System Diagram



1. UV Chamber - This part of the system houses the UV sleeve and lamp, and also controls the flow of water through the system.
2. Outlet for treated (clean) water.
3. UV Lamp (or bulb) - The lamp of a UV system produces UV-C, which is UV light considered to be germicidal. However, different lamps perform different functions, so the type of lamp used will be contingent on the application and disinfection requirements.
4. UV Quartz Sleeve - The quartz sleeve of a UV system is the long, cylinder-shaped tube. The tube is made of quartz glass and is there to protect the UV lamp which is powered by electricity from the flow of water. The UV lamp transmits light through the tube into the water. It is important to clean the sleeve (generally when the lamp is changed) as minerals and contaminants in the water can cloud the glass tube.
5. UV Sensor - Available option on most UV systems, the UV sensor monitors and indicates the intensity of the UV light. If the intensity becomes too low, even though the lamp is on, an alarm is triggered.

Application Range

- a) Sewage Treatment Plant
- b) Water Treatment Plant

Product Specifications

Product Name	Model No.	SPECIFICATION
UV SYSTEM	UTT3	Flow Range- upto 4.5 m ³ /hr @ (65% UVT)
	UTT4	Flow Range- 4.5 to 8.0 m ³ /hr @ (65% UVT)
	UTT6	Flow Range- 8.0 to 10.0 m ³ /hr @ (65% UVT)
	UTT8	Flow Range- 10.0 to 15.0 m ³ /hr @ (65% UVT)
	UTT12	Flow Range- 15.0 to 25.0 m ³ /hr @ (65% UVT)
	UTT16	Flow Range- 25.0 to 35.0 m ³ /hr @ (65% UVT)

Contact Us



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